## ABOUT EARS.

I HAVE been asked, says Toussenel, why the horse, which delights in cleanliness, muddles the water before drinking; and why his ears, erect in servitude, turn downward in the state of liberty, contrary to what occurs in the dog.

The answer to these questions is easy; and, in the first place, the horse does not mean to muddy the water which he agitates.

The horse is a native of sandy, sun-burned regions, and he rejoices in the toilet—two reasons for loving the bath. But, as in these countries the rare and treacherous wave is the habitual resort of crocodiles, of leeches and electric eels, the horse paws the water before entering it, so as to drive away such vermin; and he sounds the bottom with his hoof to see whether it be propitious for his bath, for every horse that feels the water is ready to roll in it.

As to the second question, the answer requires a physiological study of the ear.

The ear is an organ destined to give information by the perception

of sounds in space; consequently the direction of the ear of a beast should instruct you at once concerning its behavior and its character. The ear of the hare, directed backward, tells you that this poor animal is destined to be chased. This direction of its channel of sound announces the especial object of the organ, viz., to inform the fugitive of the number and the swiftness of his pursuers.

But, if the ear of the beast chased is turned backward, so cannot be the ear of the pursuer, of the fox, or the wolf, or the hunting-dog.

The ear of these forcers assumes, in fact, an opposite direction. The primitive hunting-dogs—the greyhound and the shepherd's dog, which only hunt by running down their game—will then have their ears straight, and the auditory canal directed forward. The weasel, the cat, even the fox, which need to know what is going on among the branches overhead, will have their ears large, expanded, and fitted to perceive little noises above them.

The horse, in his wild state, wanders in pasturing, but does not hunt; he has no man in charge, and grazes with his head low. The conduit of the ear is then directed toward the soil, which is the best of all conductors of sound, and which transmits to it that of the march and the voices of the enemy.

But, when the horse has once accepted the companionship of man's labors and dangers, other duties are incumbent on him in this capacity, and he changes his bearing along with his diet. As soon as, with this change of spirit, he must take the lead, and guide his rider in the dark, he raises his ear like the greyhound, so as to catch every sound in front of him. By virtue of the same principle, the setter dog, when made to quit running down his game, ceases to hold his car straight, and wears it like the mummy.

Why, then, all dogs of running breeds ought to carry their ears straight, like the greyhound and the Arabian horse? Certainly; and you are up to your ears in the truth.

Pallas, cited by Cuvier ("Règne Animal"), has also noted the downward cast of the ear in a wild colt caught upon the steppes of Tartary, and which became extremely docile.

The horse has two muscles of the ear peculiar to himself among animals, and which give it a varied freedom of movements.

The ears of the mole close by a sphincter muscle which excludes the dirt. In the owl and the bat tribes, this organ has remarkable developments—in some of the latter (to which it gives name) being as large as the rest of their body, and completing that grotesque appearance which has made them a favorite type of the hobgoblin.